2013 Indiana response to:

40 CFR Part 51-Subpart S Inspection/Maintenance Program Requirements 51.366 – Data Analysis and Reporting Requirements

(c) Quality Control Report

(1) The number of emission testing sites and lanes in use in the program:

During the period of January 1, 2013 and December 31, 2013 there were seven test sites and twenty-four operational testing lanes.

2013 Indiana response to:

40 CFR Part 51-Subpart S Inspection/Maintenance Program Requirements 51.366 – Data Analysis and Reporting Requirements

(c) Quality Control Report

(2) The number of equipment audits by station and lane:

From 1998 to 2003 none of the exhaust gas sampling systems at any of the test sites failed a semi-annual gas challenge audit. In 2004 the Indiana Department of Environmental Management (IDEM) began performing periodic reviews of monthly calibration and maintenance data for all of the exhaust gas analyzers and dynamometers in the testing lanes in lieu of gas challenge audits.

Operations at the test sites are also monitored remotely by a system of web cams installed at each testing facility. The cameras provide views of the all the testing lanes from the front, looking toward the back and from the back, looking toward the front. Cams are also located in the manager's office, the license renewal booth, the safe and VIR locked storage room, and on the front of each site looking out at the vehicle queue area. IDEM I/M personal view all of the test sites on a daily basis. Each morning mini-calibrations are conducted on each lane and zero/spans are run at least every two hours while the test sites are open. IDEM I/M program personal check the mini-cals and zero/spans daily from their Indianapolis location.

See the attached check sheets: 2013 Indiana I/M program quarterly test equipment calibration data audits.

2013 INDIANA I/M PROGRAM QUARTERLY TEST EQUIPMENT CALIBRATION DATA AUDITS

Calibration Records Audit (Date: 4/24/13	
Vehicle Emission Test Site: 1	Hammond - testsite"		
Constant Volume Sampling Sequipment checks and ten p	- -	ynamometer Calibration	
Date calibration performed -	result Date cal	libration performed – result	
Lane: # [_CVS Cals,	BAR-AD Cals	4WD Dynolals	
1-2B-13 JKC OK	1-28-13 JKC OK 2-11-13 JC OK	1-78-13 Mad OK 2-25-13 Chad OK	
3-4-13 JK OK	3-4-13 JK1 PK	3-25-13 Chad DK	
Lane: #2 CVS MS, 1-28-13 JKC PK 2~11-13 JC PK 3-4-13 JKC PK	BAR-40 Cals 1-20-13 JKC OK 2-11-13 JKC OK 3-4-13 JKC OK	2 WD Dyno Cal 1-24-13 Chad Ok 2-21-13 Chad Ok 3-14-13 Chad OK	
Lane: #3	BAR-40/Whs	aura Asla	
1-20-13 JKC OK	1-213-13 JKC PK	2WD Typp Cals, 1-24-13 Charl OK	
2-11-13 JC OK	2-11-13 IC OK 3-4-13 IW OK	2-21-13 Chad OK 3-14-13 Chad OK	
Lane: #_ Lane #3 is also an DBD tandem test lane			
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Calibration Records Audit (2011) Quarter, 2013	Date: B-4-13			
Vehicle Emission Test Site: Hammond, test 5/1/e #/				
Constant Volume Sampling System (equipment checks and ten point calibrations)	Dynamometer Calibration			
Date calibration performed – result	Date calibration performed – result			
Lane: #1	4WD Dyng Cals. 4-22-13 FRChad CK			
5-6-13 JKC PK 5-6-13 JKC PK 0-3-19 JKC PK 4-3-13 JKC D	K 5-20-13 Chad OK K 6-24-13 Chad OK			
Lane: #2 OVS Cals. 4-15-13 JKC OK 4-15-13 JKC OK 5-6-13 JKC OK 6-3-13 JKC OK 6-3-13 JKC OK 9-3-13 JKC	2 WD Dyno Cals. OK 4-18-13 Chad OK OK 5-9-13 Chad OK OK 6-26-13 Chad OK			
Lane: #3 OVS Cak, 4-15-13 JKC OK 5-6-13 JKC OK 6-3-13 JKC OK 6-3-13 JKC	els, 2 WD D vyo Cale, DK 4-18-13 Wash OK DK 5-9-13 Chad OK PK 6-26-13 Chad OK			
Lane: #				
,				

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Calibration Records Audit (3rd Quarter, 20 3)	Date: 11-15-13
Vehicle Emission Test Site: Hammond, test	site#1 PAL
Constant Volume Sampling System (equipment checks and ten point calibrations)	Dynamometer Calibration
Date calibration performed – result	Date calibration performed – result
Lane: # 1 CVS Cals 7-B-13 JKO OK 7-B-13 JKC OK 9-12-13 JKC OK 9-12-13 JKC 9-13 JKC OK 9-13 JKC	4WJ Jyho Cals OK: 7-15-13 Chad OK OK: 80-26-13 Chad OK OK: 9-30-13 Chad OK
Lane: #2 CVS Cals, 7-16-13 JKC PK 9-12-13 JKC PK 9-12-13 JKC PK 9-12-13 JKC PK 9-12-13 JKC	15. 2WD Dyno Calg PK 7-14-13 Chad PK 1 OK 8-28-13 Chad PK 1 OK 9-20-13 Chad PK
Lane: #3 CK9 CATS, BAR40 CAL 7/8-13 JKC OK 7-8-13 JKC 8-12-13 JKC OK 8-12-13 JKC 9-9-13 JKC OK 9-9-13 JKC Lane #3 is also an DE	S. 2WD DynpCals, OK 7-19-13 shad OX OK B-28-13 shad OX OK 9-20-13 shad DII tawlem line,
Lane: #	

Calibration Records Audit (44 Quarter, 2013	Date: 2-21-14
Vehicle Emission Test Site: Hammond,	ilte#1 BAD
Constant Volume Sampling System (equipment checks and ten point calibrations)	Dynamometer Calibration
Date calibration performed – result	Date calibration performed – result
Lane: #1 OVS Cals. BAR-40 Cal	4WD Dyno Cal
10-21-13 JKC OK 10-21-13 JKC	OK . 0-28-13 Chad OK
11-4-13 JKC OK 11-4-13 JKC	ax 11-25-13 Charl OK
12-2-13 JKC PL 12-2-13 JKC	OK 12-23-13 Unad OK
Lane: #2 (No. Mat BAR-40 Can 10-21-13 JKC PK 10-21-13 JKC 11-4-13 JKC PK 11-4-13 JKC 12-2-13 JKC PK 12-2-13 JKC	2 WD Dyna Cal OK 10-25-13 chad DK 10-27-13 chad DK 12-11-13 chad OK
Lane: #3 (Also ORD tandem lane) OVG Cal BAK-40 (10-21-13 JKC OK 10-21-13 J 11-4-13 JKC OK 11-4-13 J	COK 10-30-13 and OK COK 11-27-13 Chad OK
12-2-13 JKC CK 12-2-13	KC OK 12-11-13 Chad OK
Lane: #_ Yearly Cal	સ્તુ
mel 12-23-13 SAD (CFV) Cal JC	OK.
Lane 2 12-2313 SAD(CFV) Ca	(to ok
LANE 3 12-23-13 SAD (CFV) CA	JC. OK

Calibration	Records Audit	(Lst Quarter, 2	10 (3)	Date	: 4/25/201
Vehicle Emi	ssion Test Site	: Griffith,	testsite#2		PAR
Constant Vo	lume Samplin	1 -	Dy	namometer Ca	alibration
	tion performe	d – result	Date call	ibration perfo	med – resu
Lane: # 1/5 Called 1-14-13 J 2~4~13 J 3-4~13 S	ation COK COK	BAR-90 Cal 1-14-13 JU 2-4-13 J 3-4-13 J	ok ok ok ok ok ok	4WD Tyl 1-20-13 2-25-13 3-18-43	boals. Should Did Shad Di
Lane: #2 OVS ON 1-14-13 2-4-13 3-4-13	S OK JC OK JC OK	BAR-40 (1 1-14-13 2-4-13 3-4-13	Lg IC PK IC PK	2ND 1-25-13 2-13-13 3-7-13	Dyna Cala Chad Of Chad Of Chad Of
Lane: # <u>3</u>	Tandem 0	BDII lane	"Only"		
			, , , , , , , , , , , , , , , , , , ,	•	
Lane: #4	Tandem Is JC PK JC PK JC PK		e and Idle of Cals SCOK SCOK	-Enhauced 2WD.DJ 1-25-13 2-13-13 3-7-13	test. Up Cals. Chad Of Chad Of

Calibration Records Audit (2nd Quarter, 20 13)	Date: \$ -6-13
Vehicle Emission Test Site: Criffith, test 511	e#2 PA
Constant Volume Sampling System (equipment checks and ten point calibrations)	Dynamometer Calibration
Date calibration performed – result	Date calibration performed – result
Lane: #1 CV5 Cals. BAR-ADCals.	4WD Dyno Cals
4-B-13 JC OR 4-B-13 JC OR	4-6-13 Chad OK
5-13-13 JC OK 5-13-13 JC OK 6-10-13 JC OK 6-10-13 JC OK	6-24-12 Cloud OK
Lane: #2 OVS Cals 4-30-13 JC OK 4-30-13 JC OF 5-79-13 JC OK 5-29-13 JC OK 6-10-13 JC OK 6-10-13 JC OK	2WD Drup Cale, 4-10-13 Chad PK 5-3-13 Chad OK 6-21-13 Chad OK
Lane: # <u>3</u>	· · · · · · · · · · · · · · · · · · ·
OBDIL "only tandem lane	
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Lane: # 4 (VS ONG. BARADCALS. 4-18-13 JC PK 4-18-13 JC PK 5-25-13 JC PK 5-25-13 JC PK 6-17-13 JC OK 6-10-13 JL P	2WD. Dyno Cals, 4-10-13 Chad DK, 5-3-13 Chad DK

	p. **
Calibration Records Audit (3v2/Quarter, 20	13) Date: 11/15/13
Vehicle Emission Test Site: Oriffith, te	stsite #2 PAN
Constant Volume Sampling System (equipment checks and ten point calibrations	Dynamometer Calibration s)
Date calibration performed - result	Date calibration performed — result
Lane: # 1 CVS Calg. 7-1-13 JC PK 7-1-13 JC C 8-5-13 JC PK 9-15-13 JC C 9-16-13 JC PK 9-15-13 JC C	4 WD Dyno Cals, 2k 7-15-13 Chad OK 8-12-13 JC OK 9-23-13 Chad OK
Lane: #2 (NS CALS FAR 40 Ca 7-1-13 JC OK 7-1-13 JC OR 9-16-13 JC OK 9-16-13 JC	LC: 2WD Dyno C & Co DK 7-11-13 Ohad OK CK 8-12-13 JC OK OK 9-18-13 Ohad OK
Lane: # 3	
OBD IL "only	" Tandom Lane,
Lane: # 4 [b. 2WDDynoCale. OK 7-11-13 Ohad PK OK 8-12-13 JC OK OK 9-16-13 Chad OK
#1 9-23-13 Annual	SAOCFY Cals, VI OK
40 0-23-13 Annual 3	SAD CFY CUIS, JC DK
#4 9-23-13 Annual	SANCEV Cals, JC PCK

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Calibration Records Audit (4thQuarter, 2014)	Date: 7-20-14
Vehicle Emission Test Site: Driffith, Site#2		PAL
Constant Volume Sampling S (equipment checks and ten p	•	Dynamometer Calibration
Date calibration performed -	- result Date of	calibration performed – result
Lane: # 1 (VS (M). 10-7-13 VD OK 11-4-13 JC OK 12-4-13 JC OK	BAR-90 Cal. 10-7-13 TO OK 11-4-13 TO OK 12-913 TO OK	412DD ynp Cal, 10-21-13 Chad OK 11-25-13 Chad OK 12-16-13 Chad OK
Lane: # 2 CVG Cal 10 ~ 7 - 13 JC OK 11 ~ 4 ~ 13 JC OK 12 - 9 - 13 JC OK	BAR-40 Cal, 10-7-13 JC DK 11-4-13 JC DK 12-9-13 JC OK	ZWDDyng Cal, 10-16-13 Charl OK 11-20-13 Charl OK, 12-12-13 Charl OK
Lane: # <u>3</u>		
0597	Only tandem lane	
	· · ·	
Lane: #4 CV5 Cal 10-7-13 TO OK	BAR40Cal 10-7-13 De OK	2WD DynoCal, 10-16-13 Chad OK
12-4-13 JO PK	12-9-13 JL OK	12-12-13 Chad OK

Calibration Records Audit (ि Quarter, 20 🔁	Date: 4/24//3
Vehicle Emission Test Site:	Hobart-testalte#3	PAD
Constant Volume Sampling S (equipment checks and ten p	-	Oynamometer Calibration
Date calibration performed -	- result Date c	alibration performed – result
Lane: #1 (VS Cab) 1430-13 /AM OK	JAR-90 Cals 1-30-13 CAM OK	4WD. DynoCals
2-25-13 CAM OK 3-76-13 CAM OK	2-25-13 CAM DK 3-26-13 CAM DK	3-4-13 Chad OK
Lane: # <u>2</u>	only test lave - tav	rdeni
Lane: #3 CUS (Vals 1-30-13 CAM OK 2-26-13 CAM OK 3-26-13 CAM OK	RAR-40 Cals 1-30-13 CAM OK 2-28-13 CAM OK 3-26-13 CAM OK	2 WD Dynp Cals, 1-15-13 Charl OK, 2-14-13 Charl OK 3-13-13 Charl OK
Lane: #		
,		

Calibration Records Audit	2MQuarter, 20 [3)	Date: 10-24-13	
Vehicle Emission Test Site:	though - Station #3	7719	
Constant Volume Sampling (equipment checks and ten	•	Dynamometer Calibration	
Date calibration performed	- result Date	calibration performed – result	
Lane: #1 CVS Tals	BAR-90 Cals	HWD DynoCals,	
4-22-13 CAM OK 5-20-13 CAM OK 6-24-13 CAM OK	5-20-13 CAM OK	5-6-13 Chad OK	
Lane: #2 OBDIT only - Tandem Lange			
	,		
Lane: #3 CVS CAIG. 4-30-13 CAM DK 5-20-13 CAM DK 6-30-13 CAM DK	JAK-90 CALG, 4-22-13 CAM DK 5-20-13 CAM DK 6-20-13 CAM DK	ZWD Dyng Cals, 4-3-13 Shad OK 5-1-13 Chad OK 6-6-13 Chad OK	
Lane: #		· ,	
3			

Calibration Records Audit (3 _W Quarter, 20 (3)	Date: 10-24-13
Vehicle Emission Test Site:	Hobart - Test Site	#3 PA
Constant Volume Sampling (equipment checks and ten	· ·	Dynamometer Calibration
Date calibration performed	- result Date	e calibration performed – result
Lane: # 1 CUS CA16: 7-29-13 DAM DK B-26-13 CAM DK 9-30-13 DAM DK	TAX-90 Cals, 7:30-13 DAM PK 8-26-13 CAM OK 9-30-13 CAM OK	HWD Dyno Cale, 7-1-13 Charl PK B-2-13 Charl PK 9-4-13 Charl OK
Lane: #2	BDILONLY-Tanden	u Laue
Lane: #3 (VS /a/g. 7-29-13 CAM OK B-32-13 CAM OK 9-30-13 CAM OK	BAR-90 Cals, 7-30-13 CAM OK 8-22-13 CAM OK 9-30-13 CAM OK	2 W.J. Dyno Chls, 7-5-13 chaol OK 8-15-13 chaol OK, 9-13-13 chaol OK
Lane: #		
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Calibration Records Audit () Q	uarter, 20 <u>/ 3</u>)	Date: 2-2/-/4
Vehicle Emission Test Site: Hology	it; test site#3	PAL
Constant Volume Sampling System (equipment checks and ten point ca		mometer Calibration
Date calibration performed – resul	t Date calibr	ation performed – result
Lane: #1 (VS) (A) 10-20-12 (A) 10-	AR-40 Cal 28-13 Cam Ok	4WD Dyno Cal
11-20-13 CAM OK 11-12-16-13 CAM OK 12	20-13 CAM DK	11-4-13 Charl OK 12-2-13 Charl OK
Lane: # <u>Z</u>	•	
OBD Only	tanden thre	
Lane: #3 OVS OA	BAR-40 Cal	2WD Dyno Cas
10-28-13 CAM OK 11-22-13 CAM OK 12-16-13 CAM OK	11-28-13 CAM OK 11-26-13 CAM OK 12-16-13 CAM OK	10-4-13 Chad OK 11-6-13 Chad OK 12-4-13 Chad OK
~ "	(6) II as Carlot as Carlot	
Lane: #	CAM DE	·
Laurett 3 11-13-13	DAM OK.	

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Calibration Records Audit (5 Quarter, 20 3)	Date: 5-2-13
Vehicle Emission Test Site: Orpun Vint-Sta	tion 4 PAD
Constant Volume Sampling System (equipment checks and ten point calibrations)	Dynamometer Calibration
Date calibration performed – result	Date calibration performed – result
Lane: #1 DV5 (A15) 1-25-13 JC OK 1-25-13 JC OK	4WD Dyno Cals,
2-18-13 JN ON 2-18-13 JKC D	C 2-11-13 Chad OF
3-25-13 TKC DK 3-25- TKC D	K 3-11-13 Chad DK
Lane: #2 OVS CAIS 1-30-13 JC OK 2-10-13 JKC OK 3-25-13 JKC OK 3-25-13 JKC	2 WD Dynp Cals, 1-31-13 Chad Ph 2-22-13 Chad Ok 0k 3-25-13 Chad Ok
Lane: #3	
abott only tandem lane	
Lane: #	

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Calibration Records Audit (2nd Quarter, 20 13)	Date: \$-6-13
Vehicle Emission Test Site: Orown Point, station#	4 041
Constant Volume Sampling System (equipment checks and ten point calibrations)	ynamometer Calibration
Date calibration performed — result Lane: #	HWDDyno CAIS 4-B-13 Chad OK 6-17-13 Chad OK
Lane: #2 OVS Cals H-29-13 JKC OK 4-29-13 JKC OK 5-13-13 JC OK 6-24-13 JKC OK 6-24-13 JKC OK	2WD JUND Calo, 4-29-13 Chad OK 5-16-13 Chad OK 6-26-13 Chad OK
Lane: #3	•
OBD I "Only" tandem lane.	
Lane: #	

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Calibration Records Audit (3rd Quarter, 2011)	Date: 11-14-13			
Vehicle Emission Test Site: Dopula Point, Station#4 PAD				
Constant Volume Sampling System (equipment checks and ten point calibrations) Dynamometer Calibration				
Date calibration performed – result Date	te calibration performed – result			
Lane: #1 DVS Dals. BAR 90 Cals.	4WD Dyno Cals,			
7-29-13 JNV OK 7-29-13 JNC OK 0-36-13 JNC OK 9-26-13 JC OK 9-30-13 JNC OK 9-30-13 JKC OK	9-19-13 And OK. 9-19-13 And OK. 9-23-13 Doub Ok.			
Lane: #2 CNS CAIS, BAR90 CAIS, 7-24-13 JKC OK 7-24-13 JKC OK 9-26-13 JC OK 9-26-13 JC OK 8-30-13 JKC OK 9-30-13 JKC OK	2 WD Dyn Cals, 7-13 Charl PK B-213 Charl PK 9-27-13 Charl PK			
Lane: #3				
OBDIL Only - tandem	lane			
•				
Lane: #				

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Calibration Records Audit (WhQuarter, 20)	$2) \qquad \qquad \text{Date: } 2/20/14$
Vehicle Emission Test Site: CMDWM Print,	Station#4 PA
Constant Volume Sampling System (equipment checks and ten point calibrations)	Dynamometer Calibration)
Date calibration performed – result	Date calibration performed – result
Lane: # L	Cals. 4WDr. Duno Cals, JD OK 10-21-13 Onacl OK JC OK 11-12-13 Chad OK JC OK 12-9-13 Chad OK
Lane: #2 CV5 Cals. 10-20-13 JV OK 11-25-13 JV OK 11-25-13 JV OK 11-25-13 JV OR 12-17-13	O Cals 2WID Dyna Cals, JC OK W-23-13 Chaol OK JC OK 11-20-13 Chaol OK JC OK 12-5-13 Chaol OK
Lane: #3	
OBD Only - tandem lane	
Lane: #_ Yearly Cals.	
Lane#1 SAD (CFV) Cal VOK	
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Calibration Records Audit	(st Quarter, 20 3)	Date: 5-2-13
Vehicle Emission Test Site:	Valparaiso-S	tation5 PM
Constant Volume Sampling (equipment checks and ten		Dynamometer Calibration
Date calibration performed	l – result	Date calibration performed – result
Lane: #1 CV5 (Als. 1-7-13 CAM OK 2-18-13 LAM OK	BAK-ADCals. 1-7-13 CAM OK 2-16 CAM OK	4 WD. Dyng Cals, 1-7-13 Chad OK 2-4-13 Chad OK
3-19-13 HAMOUK	3-18 NC PK	3-4-13 MAN OK
Lane: #2 OVS CALS 1-7-13 CAM OK ORD II PRO II	BAR-ADCALG 1-7-19 CAM DK. Only Only	2WD Dyno Cals,
Lane: #3 OVS ON19 1-30-13 CAM OK 2-18-13 CAM OK 3-18-13 CAMOK	BAR-40 Cals 1-30-13 CAM OK 2-18-13 CAM OK 3-10-13 JC OK	2WI Dyno Cals, C 1-4-13 Ahad OK 2-1-13 Chad OK 3-1-13 Chad OK
Lane: #		
,		

Calibration Records Audit (2n Quarter, 20 3)		Date: 10-75-13
Vehicle Emission Test Site: Valpawigo - Station #		5 446
Constant Volume Sampling System (equipment checks and ten point calibrations)		Dynamometer Calibration
Date calibration perform	ed – result Date	calibration performed – result
Lane: #\		
CVS CALS,	BAR-90 Cals,	4UD Dyno Cals
4-13 CAM OK	4-8-13 CAM OK	4-1-13 chad OK
5-13-13 CAM PK	5-13-13 CAM DK	5-6-13 Chad OK
6-24-13 CAM DK	6-24-13 CAM DK	6-10-13 chad 0/K
Lane: #2 	BAR-90 Cale, RDII only	2ND Dyno Cals,
6-12-13 CAM OK	6-13-13 CAM OK	p-13-13 ahad PK
Lane: #3 015 Cals	BAR-40 Cals	ZWD Dyng Cals.
4-6-13 COM OK	4-8-13 CAM DK	4-4-13 Chad OK
5-13-13 CAM PK	5-15-13 CAM DK	51-13 Chad PK
	OBD II puly -	6-6-13 Mail Ok
Lane: #	,	
3		

Calibration Records Audit (3M) Quarter, 20 3	<u> </u>
Vehicle Emission Test Site: Valparaiso - 5	lation #5
Constant Volume Sampling System (equipment checks and ten point calibrations)	Dynamometer Calibration
Date calibration performed – result	Date calibration performed – result
Lane: #1 CVO Cals, BAR-40 Cals.	4 MD Dyno Cals,
7-15-13 CAM OK 7-15-13 CAM	DK 7-1-13 chad PK
8-5-13 CAM OK 8-5-13 CAM	OK B-5-13 chad OK
9-9-13 CAMPK 9-4-13 CAM	OR 4-4-13 And OR
Lane: #2 CMS CALC. BOX. WO Calc	2 W.D. Dv nn Cale.
7-15-13 CAM DK 7-15-13 CAM	OK 7-1-13 Chad DK
8-5-13 CAN DK 8-5-13 DAM	OK 85-13 CAM OK
9-9-13 CAM DK 9-9-13 CAM	OK 4-4-13 Chad OK
Lane: #3 (NS CAIS) BAR-906	als, 2 MD Dymo Cale,
CV Chois, DIA 100	Single lane
- OBD only -=	Andem Lane
Lane: #	

Calibration Records Audit (Hth Quarter, 20 13	Date: 3/27/14
Vehicle Emission Test Site: Valpo - Stat	10 nts
Constant Volume Sampling System (equipment checks and ten point calibrations)	Dynamometer Calibration
Date calibration performed - result	Date calibration performed – result
Lane: #	F
CNA TOOLS BAR-90 Pals	4WD DynoCals
10-7-13 DAM OK 10-7-13 DAV	1 PK 10-7-13 OWAD PK
11-18-13 (AM PK 11-18-13 CAM	1 PK 11-9-13 Chad PK
12-2-13 CAM NK 12-2-13 CAM	1 OK 12-2-13 Whad OK
Lane: # 7 CVS Ca/s BAR-900	als 2WD Dyno Cale
11-21-13 CAN 10/K 11-21-13 (AM	OV 11-12 About OK
12-2-13 DAM DK 12-2-13 CAN	10K 10-4-12 /412 DK
	CON PRODUCE TO COMPANY
Lane: # <u>3</u>	
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a syll only	<u> </u>
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Anua (Flow	Cals
LANC#1 10-7-13 SAP/CFV	Cal. OK CAM
LAUR#2 10-7-13 SADICEV	Dal DK DARY

Calibration Records Audit (St Quarter, 20 3)

Date: 4-26-13

Vehicle Emission Test Site: Gary - test site #8

Constant Volume Sampling System (equipment checks and ten point calibrations)

Dynamometer Calibration

Date calibration performed	d – result Date ca	ulbration performed – result
Lane: #		
CV5 Cals	BAR40Cals	412D Dyno Cals,
1-7-13 JKC PK	1-7-13 JKC PK	1-291-13 Chad DK
2-11-13 JKC PK	2-11-13 JKC PK	2-18-13 Chad DK
3-11-13 JKC DK	3-11-13 JK OK	3-16-13 Chad OK
		,
Lane: #2	BARADCALO	2WRDyno Cals
1-7-13 JKC OK	1-7-13 JKL DK	1-18-13 Chad 10k
2-11-13 JKC OK	2-11-13 JM DK	2-70-13 Chie OK
3-11-13 JKL OK	3-11-13 JRC OK	3-13-13 (had DK
Lane: #3 NS Calo	BAR-ADCals	2 WT Tyno Cals
1-7-13 JKC NK	1-7-13 JKC OK	1-30-13 Ohnd OK
2-11-13 JK DK	2-11-13 JKC OK	2-20-13 Chad OK
3-11-13 JKC PK	3-11-13 TKC OK	3-10-13 Charl PK
Lane: #	,	
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Lane 3 is aBD tandem but retains 1M-93 capability.

Calibration Records Audit (2 M Quarter, 20 3)	Date: 18-6-13
Vehicle Emission Test Site: Gary - test site #	to Al
Constant Volume Sampling System (equipment checks and ten point calibrations)	Dynamometer Calibration
Date calibration performed – result	Date calibration performed – result
Lane: #1	HWD Dyno Cals.
4-1-13 JKC OK 4-1-13 JKC OK 5-13-13 JKC OK	5-13-13 (nad OK
6-17-13 JKC OK 6-17-13 JKC PK	V-17-13 Ohad OK
Lane: #2 [VS Cals BAR-90 Cals 4-1-13 JKC OK 4-1-13 JKC OK 5-13-13 JKC OK 6-17-13 JKC OK 6-17-13 JKC OK	2 ND DYND Cals. 4-11-13 Chad OK 5-8-13 Chad OK 6-27-13 Chad OK
Lane: #3 (V5 Cals 4-1-13 JKC OK 5-13-13 JKC OK 5-13-13 JKC OK 5-13-13 JKC OK	9 2WD Dynn Cals. 4-11-13 Chad OK 5-13 Chad OK
Q-j7-13 JAC OK 6-17-13 JAC OF Lane: #	EXITS UNK NA

Vehicle Emission Test Site:	Bary, test site #8	PAR
Constant Volume Sampling (equipment checks and ten		Dynamometer Calibration
Date calibration performed	l-result Date	calibration performed – result
Lane: #1	BARRAD CALS,	4 WD Dring Cala.
7-23-13 JKC OK	7-22-13 JKC OK	7-18-13 Chad OK
9-23-13 JA DK	9-22-13 TKL CK	930-13 Charl PK
x		
Lane: #2 CVS Cals	BARGO Cala	2 MD. Dyna Cale,
7-22-13 JKC OK	7-22-13 THE DK	7-17-13 Chad OK
9-23-13 JKC OK	9-23-13 JKC DK	9-19-13 Chad OK
Lane: #3	,	
C15 Cals.	BARAD Cals.	2WD Dung CAla
7-22-13 TKC OK	722-13 THC OK	7-17-13 Chad PK
9-23-13 JKC OK	9-19-13 JAC DK	9-26-13 Chad OK
Y 11	, , ,	
Lane: #		
7		
		•
		1 2
#1 Annual 9	AD CFV Cals OK	. 11/27/13 V

Date: 11-15-13

Calibration Records Audit (31/1 Quarter, 20/3)

Calibration Records Audit	Muarter, 20/3)		Date:	121/14
Vehicle Emission Test Site:	Jary, site#	B	OH)	
Constant Volume Sampling S (equipment checks and ten po	ystem		nometer Calil	oration
Date calibration performed -	result	Date calibra	ation perform	ed – result
Lane: # 1 015 CM. 10-26-13 JC OL 11-25-130MJC OK 12-11-13 JKC OK	BAR-40 Cul. 11-25-13 JKL 12-11-13 JKL	OK OK OK	412DDy 11-18-13 (12-16-13 (Mad OK Wad OK Chad OK
Lane: #2 CUS Dal, 10-17-13 TKC DK 11-25-13 TKC DK 12-11-13 TKC DK	BAR-90 Cal 10-17-13 JKC 11-25-13 JKC 12-26-13 JKC	OK OK	2WDD 10-23-13 C 11-22-13 C 12-13-13	yng Cal had Ok Chad OK Chad OK
Lane: #3 (NG (W) 10-16-13 JKL OK 11-25-13 JKL OK 12-13-13 JKL OK	BAR-40 Cal 10-17-13 JKL 11-25-13 JKL 12-26-13 JK	DK DK OK	ZWD 10-23-13 11-22-13 12-13-13	DynoCal, Chad Ok, Chad OK Chad OK
Lane: #				•

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Calibration Records Audit (Q Quarter, 20/3)	Date: April 24, 2013
· ·	Date. My w ~ b) 4 10
Vehicle Emission Test Site: Partige - test site#9	71/16-
•	ometer Calibration
Date calibration performed – result	on performed – result
Lane: #1 OVS Pals. 1-14-13 CAM OK 1-14-13 CAM OK 1- 2-25-13 CAM OK 2-25-13 CAM OK 2- 3-25-13 CAM OK 3-25-13 CAM OK 3-	4WP PypCa(s 14-13 Chad Ok 1813 Chad OK -11-13 Chad OK
Lane: #2 [V5 CALS BAR=90 CALG, 1-14-13 CAM OK 1-14-13 CAM OK 1-2-27-13 CAM OK 2-25-13 CAM OK 2 3-25-13 JC OK 3-25-13 JC OK 3	2 WD Dyno Cals, 1613 Chad Ok -6-13 Chad Ok -6-13 Chad Ok
Lane: #3 DBVII tandem lane Phly	,
Lane: #	•

Calibration Records Audit (21) Quarter, 20 3	Date: 1/24-/3
Vehicle Emission Test Site: Protuge - Stat	ion#9 PAD
Constant Volume Sampling System (equipment checks and ten point calibrations)	Dynamometer Calibration
Date calibration performed – result	Date calibration performed – result
Lane: # 1 DVG CUIS, FAR-90 CUIE 4-22-13 CAM DK 4-22-13 CAM 5-13-13 CAM DK 5-20-13 CAM 6-24-13 CAM DK 6-24-13 CAM	
Lane: #2 OVS Dulg; 4-20-13 OAM OK 6-19-13 OAM OK 6-19-13 CAM 6-19-13 CAM C-19-13 CAM C-19-14 CAM C-19-15 CAM C-19	le, 2WD Dyna Cale, L 4-19-13 Charl DK. OK 5-2-13 Charl DK OK 6-14-13 Charl DK
Lane: #3 DBDI only too	ting
Lane: #	
· · · · · · · · · · · · · · · · · · ·	

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Calibration Records Audit (2 W/Quarter, 20 3)	Date: 10-24-13
Vehicle Emission Test Site: Portage - Station	#9 PAD:
Constant Volume Sampling System (equipment checks and ten point calibrations)	Dynamometer Calibration
Date calibration performed – result Date	e calibration performed – result
Lane: # 1. DVS Juls. 7-15-13 CAM OK 0-26-13 CAM OK 9-30-13 CAM OK 9-30-13 CAM OK 9-30-13 CAM OK	4WD Dyng Cals, 7-18-13 Ohad Ok 9-19-13 CAM DK 9-16-13 Chad OK
Lane: #2 (NS Cals BAR-90 Calg. 7-29-13 CAM OK 7-24-13 CAM OK 9-27-13 CAM OK 9-30-13 CAM OK 9-24-13 CAM OK	2WDDyyp Cyle 7-5-13 Quad OK 8-45-13 Quad OK 9-6-13 Quad OK
Lane: #3 OBDIT only lane	
Lane: #	

Calibration Records Audit (1)th Quarter, 20(3)	Date: 2-21-14
Vehicle Emission Test Site: Portuge, Fite#1	A PAD
Constant Volume Sampling System (equipment checks and ten point calibrations)	Dynamometer Calibration
Date calibration performed – result Dat	te calibration performed – result
Lane: #1 (VS CW 10-21-13 CAM OK 11-10-13 CAM OK 11-10-13 CAM OK 12-9-13 CAM OK 12-9-13 CAM OK	4WD Dyno Cal 10-28-13 Chad OK 11-18-13 Chad OK 12-4-13 Chad OK
Lane: #2 (NS CAL BAX-90 Cal 10-21-13 CAM DK 10-21-13 CAM DK 11-20-13 CAM DK 11-20-13 CAM D 12-9-13 CAM DK 12-9-13 CAM D	240 Dynb Cal 10-4-13 Lhad OK k 11-18-13 Chad OK k 12-5-13 Chad OK
Lane: # <u>3</u>	
OBD tandem lane only	
Hane: #_ Yearly Cal. 10-21-13	C Ane#1 Ain Flow Ca K lane#2 Air Flow Ca

2013 Indiana response to:

40 CFR Part 51-Subpart S Inspection/Maintenance Program Requirements 51.366 – Data Analysis and Reporting Requirements

(c) Quality Control Report

(3) The number and percentage of stations that have failed equipment audits:

None

(4) Number and percentage of stations and lanes shut down as a result of equipment audits:

None

During the course of our calibration paperwork audits at the test sites we have found that if an analyzer or dynamometer has experienced some difficulty holding a calibration it is replaced.

On a daily basis, as soon as a problem manifests itself with a failed daily calibration or failed zero/span check the test equipment is locked out and the lane is automatically shut down. Inoperable equipment is repaired or replaced timely manner.